

Split 1-2

Work Order ID 111990

January-28-14 10:03:58 AM

111990

Page 1

Item ID: D4653-3

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Collar

Start Date: 28/01/2014 Start Qty: 14.00

14

Required Date: 28/01/2014 Req'd Qty: 14.00

14

7.0

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: 

Date: 14-01-28

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4653

REV A

100

Cut blanks as per folio

0.00

100

Bandsaw

Memo

0.00

Jeaspa Bandsaw

CUT BLANK AT 3.600"

14-3-11

14





105

105

Doosan

Hardinge CNC LATHE SMALL

0.00

Doosan Lathe

Memo

0.00

Machine as per folio FR115

FOLIO REV: N/A

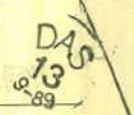
DWG REV: A

Deburr

14-3-11

7





DAS
40
9-89

14/03/13

END
OF
13-0

Work Order ID 111990

January-28-14 10:03:58 AM

111990

Page 2

Item ID: D4653-3

Revision ID:

Item Name: Collar

Start Date: 28/01/2014 Start Qty: 14.00

Required Date: 28/01/2014 Req'd Qty: 14.00

Reference:

Accept

N9000040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

QC:

Date:

Tooling:

Date:

SPC (Y/N):

Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.00

Quality Control

14-3-11

7

0

D4
73
89

120

QC8- Inspect parts - second check

0.00

120

QC

Memo

0.00

Quality Control

7

0

JFC 2014-03-13

121

Chemical Conversion Coat per QSI005 4.1

0.00

121

HandFinish

Memo

0.00

Hand Finishing

7

76

14-3-14



Work Order ID 111990

January-28-14 10:03:58 AM

111990

Page 3

Item ID: D4653-3
Revision ID:
Item Name: Collar
Start Date: 28/01/2014 Start Qty: 14.00 *14*
Required Date: 28/01/2014 Req'd Qty: 14.00 *14*
Reference:

Accept

N9000040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals: Process Plan: _____ Date: _____
QC: _____ Date: _____

Tooling: _____ Date: _____

SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	
123 *123* QC Quality Control	QC7-Inspect Chemical Conversion Coat Memo	
130 *130* Packaging Packaging	Identify as per dwg & Stock Location: <u>E.A.</u> Memo	
140 *140* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	

Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

0.00

0.00

0.00

0.00

0.00

0.00

(x7)

7

14-03-17

14-03-17

Picklist Print

January-28-14 10:03:57 AM

Page 1

Work Order ID: 111990

Parent Item: D4653-3

Parent Item Name: Collar

Start Date: 28/01/2014

Required Date: 28/01/2014

Start Qty: 14.00

Required Qty: 14.00

Comments: IPP REV:A NEW ISSUE 12-06-11 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M6061T6R3.500

Purchased

No

f

22.0000

4

6061 RD bar 3.50

SA 12-1-3-11

Location

Loc Qty

Loc Code

MAT005

22

124900

10

m128054

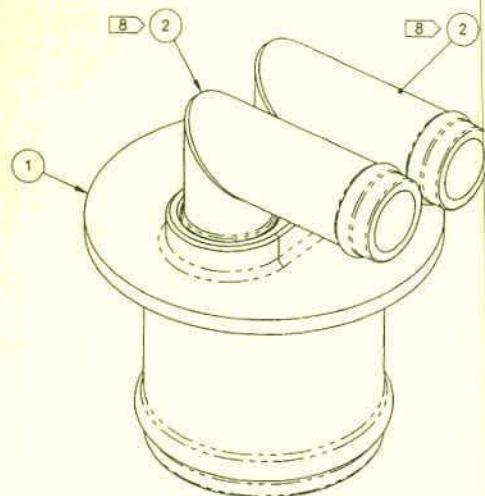
12

6061T6

3.250

14306

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4653-041	VENT MANIFOLD ASSEMBLY
1	1	D4653-3	COLLAR
2	2	D4653-045	FITTING ASSEMBLY
3	A/R	LUBRICANT	MOLKOTE 55 O-RING GREASE



D4653-041 VENT MANIFOLD ASSEMBLY

NOTES:

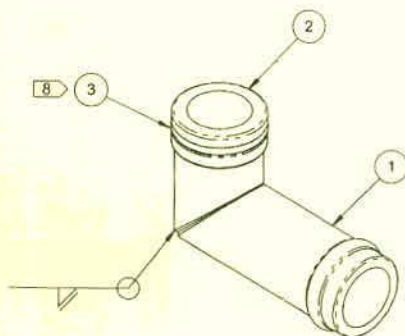
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.35 lbs
- 8) APPLY A LAYER OF MOLYKOTE 55 O-RING GREASE TO O-RING PRIOR TO INSTALLING D4653-045

111990 MB
14-01-28

RELEASED
2012-11-05
JW

A	NEW ISSUE	MB	12.07.25
REV.	DESCRIPTION	BY	DATE
DESIGN	JF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JB		
CHECKED	JB	DRAWING NO.	REV. A
MFG. APPR.	JB	D4653	SHEET 1 OF 6
APPROVED	JB	TITLE	SCALE
DE APPR.	JB	VENT MANIFOLD ASSY	NTS
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ITEM	QTY -045	P/N	DESCRIPTION
	X	D4653-045	FITTING ASSEMBLY
1	1	D4653-7	LARGE FITTING
2	1	D4653-9	SMALL FITTING
3	1	D4654-3	O-RING



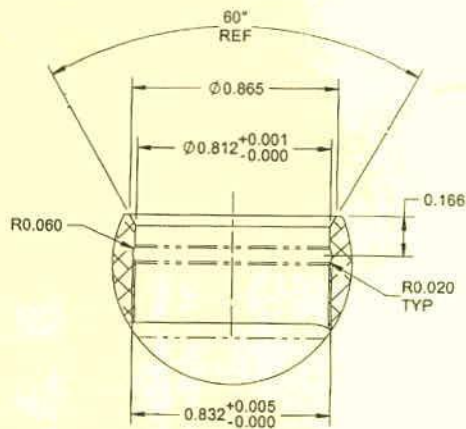
D4653-045 FITTING ASSEMBLY

NOTES:

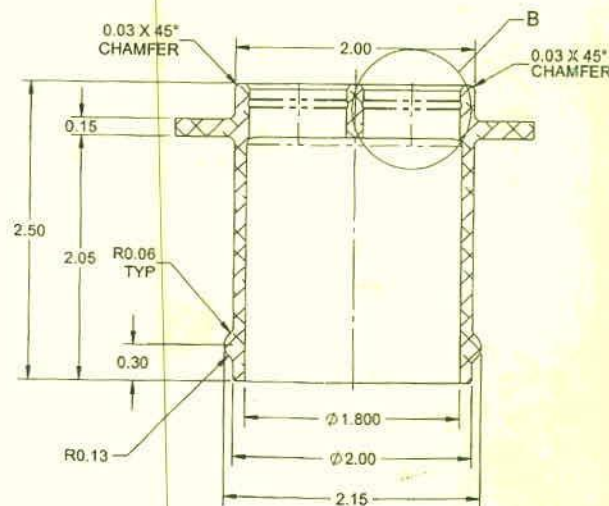
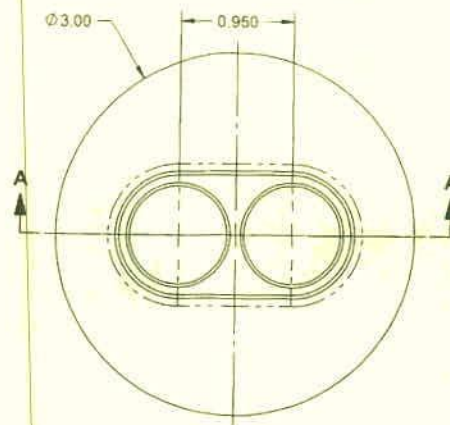
- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.06 lbs
- 8) WELD PER QSI 004
- 9) CHEMICAL CONVERSION COAT PRIOR TO INSTALLING O-RING

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2012-11-05
MP

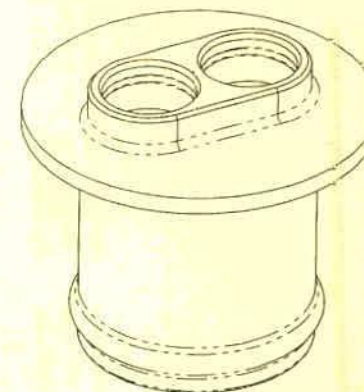
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DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4653	SHEET 2 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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SECTION B-B
SCALE 2X, 2 PL



SECTION A-A



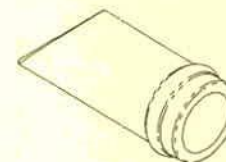
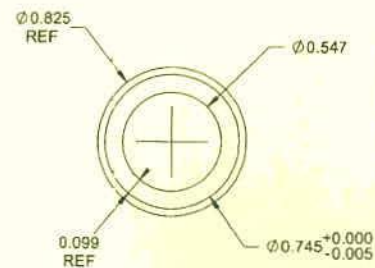
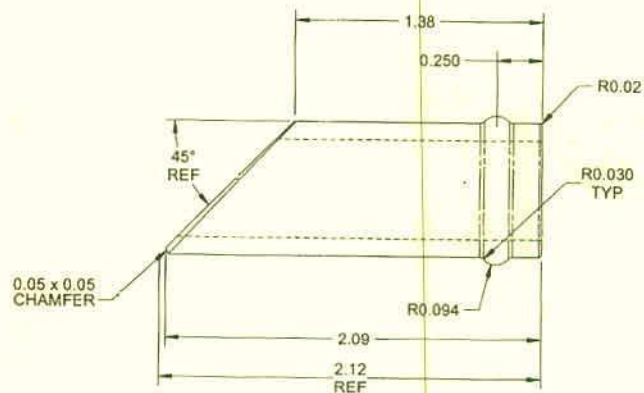
D4653-3 COLLAR

NOTES:

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6R
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.24 lbs

RELEASED
2012-11-15
-40

DESIGN	JF	DART AEROSPACE LTD	
DRAWN	JF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	JF	DRAWING NO.	REV. A
MFG. APPR.	JF	D4653	SHEET 3 OF 6
APPROVED	JF	TITLE	SCALE
DE APPR.	JF	VENT MANIFOLD ASSY	
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D4653-7 LARGE FITTING

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2012-11-05
JWS

NOTES:

1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6R

2) FINISH: N/A

3) TOLERANCES PER DART QSI 018 UNLESS OTHERWISE NOTED

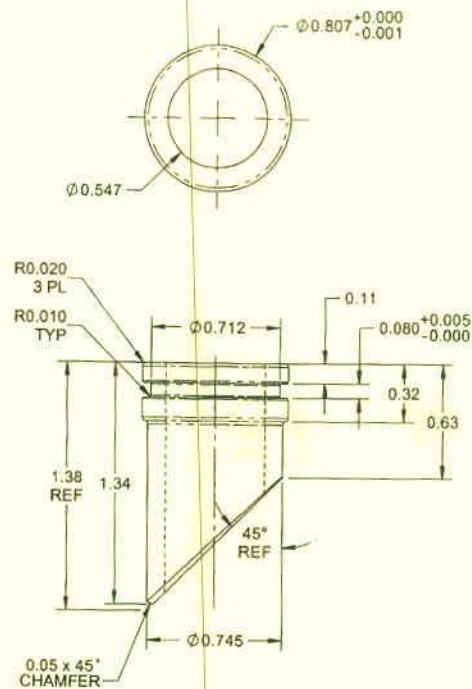
4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: N/A

7) WEIGHT: 0.04 lbs

DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4653	SHEET 4 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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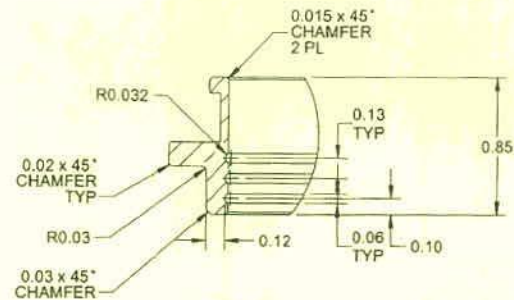
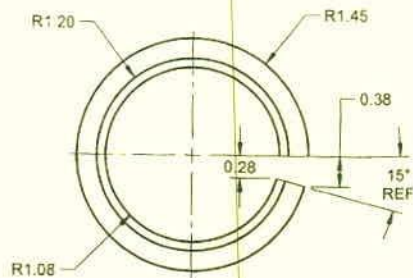
D4653-9 SMALL FITTING

NOTES:

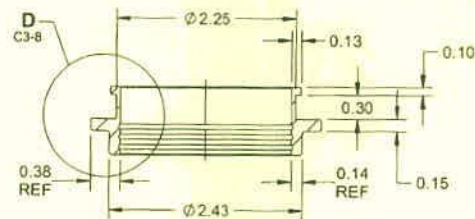
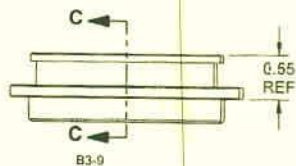
- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6R
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.02 lbs

DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4653	SHEET 5 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	VENT MANIFOLD ASSY	NTS
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2012-11-05
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DETAIL D C4-9
SCALE 2X



SECTION C-C C6-9

D4653-11 CLAMP

NOTES:

- 1) MATERIAL: DELRIN II 150E OR ACETRON GP ACETAL
REF DART SPEC M-DELRIN-B
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.7
- 7) WEIGHT: 0.032 lbs

DESIGN	JF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JF		
CHECKED	JP	DRAWING NO.	REV. A
MFG. APPR.	JP	D4653	SHEET 6 OF 8
APPROVED	JP	TITLE	SCALE
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RELEASED
2012-11-05
AWD

DART AEROSPACE LTD		Work Order: 111990
Description: Collar		Part Number: 14653-3
Inspection Dwg: 14653 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
10° ref	±.5°	60°	/			
Ø.865	±.016	.874	/			
Ø.812	+0.001/-0.005	.813	/			
R.060	±.010	R.08	/			
.166	±.016	.165	/			
.832	+0.005/-0.000	.835	/			
2.50	±.030	2.507	/			
2.05	±.030	2.048	/			
.30	±.030	.30	/			
R.06	±.030	R.03	/			
R.13	±.030	R.14	/			
2.15	±.030	2.148	/			
Ø2.00	±.030	2.00	/			
Ø1.800	±.016	1.803	/			
2.00	±.030	2.995	/			
.03145°	±.030/±.5°	.03145°	/			
.15	±.030	.157	/			
Ø3.00	±.030	.298	/			
.950	±.010	.948	/			

Measured by: SA	Audited by: JFC	Preliminary Approval:
Date: 14-3-11	Date: 2014-03-13	Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15

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